

EXHIBIT 1

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

United States of America, State of
Arizona, State of California, District of
Columbia, State of Florida,
Commonwealth of Massachusetts,
Commonwealth of Pennsylvania, and
Commonwealth of Virginia

Plaintiff,

v.

American Airlines Group Inc.,

and

JetBlue Airways Corporation,
Defendants.

Case No. 1:21-cv-11558-LTS

CONFIDENTIAL

EXPERT REPORT OF NATHAN H. MILLER, PH.D.

June 9, 2022

or change fees), as well as future profits that come from engendering loyalty. I present the results of the supply calibration in the appendix.³⁰³

248. Simulation. As mentioned above, after calibrating the demand and supply models, I simulate the model by altering the structure of the market to reflect the NEA, and then allow all airlines to reset their prices. In particular, consistent with the discussion in section 4, I adjust the market structure as follows:

- Profits from segments subject to the revenue-sharing terms of the NEA are divided according to pre-NEA 2019 shares of seat-miles on all NEA routes combined. This was approximately 43 percent for American and 57 percent for JetBlue.³⁰⁴
- For products that have only some of their segments subject to the revenue-sharing terms of the NEA, profits are allocated to segments in proportion to each segment's length in miles as tabulated by the DOT in the DB1B data.
- Profits from segments that are not subject to the revenue-sharing terms of the NEA accrue to the operator of the product.
- Price-setting authority is unchanged; American sets prices for American products (even though JetBlue might earn up to 57 percent of their profits), and JetBlue sets prices for JetBlue products.

249. Then, I compute the profit-maximizing prices under this market structure, but otherwise using the estimated demand parameters and calibrated costs above. Since these parameters reflect 2019 data, this simulation yields estimates of the unilateral effects the NEA would have had in 2019 if it had been in place then.

6.3.3. Results from the simulation model show that the NEA is likely to cause a substantial lessening of competition in domestic markets

250. In this section, I present the results of my simulation model, which show the NEA is likely to substantially reduce competition in many relevant markets

³⁰³ See Appendix § 14.2.

³⁰⁴ See workpaper 38. In performing these calculations, I do not exclude the routes that are “carved out” from the NEA under First Amendment to the MGIA, but I do mark these routes with a footnote in any results that are broken out by market.

and generate incentives for an overcharge to consumers of approximately \$696 million.³⁰⁵

251. In Exhibit 24, I summarize results for my baseline specification.³⁰⁶ I organize the results using the same market categorizations I described in sections 4.3 and 6.1: NEA nonstop overlap markets; NEA mixed overlap markets; connect overlap markets; and other relevant markets.³⁰⁷

EXHIBIT 24

Simulation of unilateral effects of the NEA, Domestic markets

	NEA nonstop overlap^{[1][2][3]}		NEA mixed overlap^[1]	Connect overlap^[1]	Other relevant markets^[1]	Total
	All	<i>Excluding carved out routes^[4]</i>				
1. Overcharge ^[5]	\$640M	<i>\$437M</i>	\$38M	\$9M	\$8M	\$696M
Price effects^[6]						
2. AA/B6 nonstop	16.7%	<i>11.2%</i>	0.8%	0.0%	0.2%	
3. AA/B6 connect	6.7%	<i>6.1%</i>	7.8%	0.4%	0.4%	
4. All AA/B6 products	16.2%	<i>10.9%</i>	1.3%	0.1%	0.3%	
5. All products	9.0%	<i>5.9%</i>	0.6%	0.0%	0.1%	
6. Count of markets	29	<i>23</i>	68	546	636	1,279
7. AA/B6 pre-NEA revenue	\$2,183M	<i>\$1,879M</i>	\$1,659M	\$4,072M	\$1,922M	\$9,836M

Source: DB1B; T-100; MGIA; First Amendment to the MGIA

Note:

[1] Market categorization is at the nondirectional annual level. Market categories are defined in § 4.3. All columns except for “other relevant markets” focus on markets where, in the round-trip directional dataset as prepared for simulation (see Appendix § 9) the Defendants overlap in at least one direction-quarter, and where at least one of the Defendants in at least one direction-quarter has at least one product touching an NEA airport.

[2] Excludes NYC (JFK/LGA)–Daytona Beach, FL (DAB), NYC (JFK/LGA)–Charlotte (CLT), and NYC (JFK/LGA)–Seattle (SEA), where I am aware of a structural change prior to COVID-19 that would make the market no longer an NEA nonstop overlap.

[3] Boston Logan–Washington National values based off of 2019 Q4 only because it is the only quarter I use to quantify the competitive effects of the NEA. Welfare measures and AA/B6 pre-NEA revenue are scaled up for each direction separately to the full year using passenger counts. American and JetBlue were the only nonstop carriers for Q1, Q2, and part of Q3, but Delta began offering nonstop service during Q3.

[4] Routes currently carved out of the NEA according to the First Amendment to the MGIA are excluded from statistics in this column.

[5] Overcharge is the difference in observed and post-NEA prices multiplied by the number of tickets sold in the pre-NEA, 2019 data. Overcharge is adjusted to account for one-way passengers using quarter-specific one-way passenger scaling factors. See Appendix § 14.4 for an explanation of this adjustment.

[6] Price effects are average changes across all relevant products, weighted by pre-NEA passenger count.

³⁰⁵ Throughout this section, I measure harm to consumers as the overcharge faced by consumers. The overcharge is calculated as the difference in observed and post-NEA prices, multiplied by pre-NEA quantities.

³⁰⁶ In Appendix § 14.5, I present detailed results market by market. Also, I understand that Defendants have argued in their Motion to Dismiss that Newark Liberty should be considered part of the same endpoint as JFK and LaGuardia. See Motion to Dismiss, § II.B. I have estimated unilateral effects if one were to assume, contrary to the evidence and analysis I present in §§ 5.3.2–5.4, that Newark Liberty should be included in the New York City endpoint. This does not qualitatively affect the results or my conclusions; total overcharge under this assumption is \$627 million. See workpaper 39.

³⁰⁷ As in § 6.1, in assigning categories, I consider all data from that market in 2019—across all four quarters, and across both directions, including one-way travel and the relevant portions of three-city travel.

252. I begin with results for the NEA overlap markets. As a reminder, these are markets in which at least one endpoint is an NEA airport and both American and JetBlue offer nonstop service. In these markets, the simulation estimates American and JetBlue will have the incentive to raise price by an average of more than 16 percent, and all airlines in the market will have an incentive to raise prices by an average of around 9 percent. These results indicate that the NEA creates large incentives for American and JetBlue to compete substantially less aggressively in the NEA nonstop overlap markets.

253. Indeed, based on 2019 data consumers in the NEA nonstop overlap markets would have experienced an annual overcharge of around \$640 million. The vast majority of competitive harm captured by this model comes from these markets, where Defendants compete head-to-head with nonstop products and each tends to have high market shares.

254. In the other groups of markets, based on 2019 data consumers would have experienced an annual overcharge of approximately \$56 million. Most of that total comes from the NEA mixed overlap markets—markets in which at least one endpoint is an NEA airport, and one of American or JetBlue offers nonstop service while the other offers only connecting service.

255. Effects in the connect overlap³⁰⁸ and other relevant markets³⁰⁹ are smaller. In the case of connect overlap markets, I note that the average price effects I show in Exhibit 24 include the small effects for markets that are relatively unaffected by the NEA revenue sharing. However, as I discuss below, there are markets with substantial estimated effects within the set of connect overlap markets.

³⁰⁸ Markets in which both American and JetBlue offer service, and profit sharing through the NEA affects only their connect products. I offer more detail in § 4.3 about the types of markets that fall into this category. The competitive effect from the NEA in these markets tends to relate to connecting products rather than nonstop ones, even though in some markets one or both Defendants offer nonstop service. These nonstop products do not touch NEA airports and thus are not subject to profit sharing under the NEA.

³⁰⁹ These markets include certain non-overlap markets that still face incentive changes due to the NEA. For example, consider a market with an American monopoly, and two American products: One nonstop product that is not subject to NEA profit sharing, and one connecting product that connects at LGA, meaning that it is subject to NEA profit sharing. American will have an incentive to lower the price of the nonstop product and raise the price of the connecting product, to redirect customers toward the product it does not share with JetBlue.

256. I now discuss market-level results. In Exhibit 25, I present market-level merger simulation results for the NEA nonstop overlap markets.

EXHIBIT 25

Market-level simulation results, Domestic NEA nonstop overlap markets

		Overall price change ^[1]		Overcharge ^[2]		
		Revenue pre-NEA	AA/B6	All products	Per pre-NEA passenger	
Markets with BOS endpoint						
1.	Boston (BOS) – Washington National (DCA) ^[3]	\$136.9 M	60.2%	54.7%	\$108.3 M	\$245.88
2.	Boston (BOS) – Charlotte (CLT) ^[4]	\$58.8 M	92.5%	90.1%	\$69.8 M	\$410.48
3.	Boston (BOS) – Philadelphia (PHL) ^[4]	\$88.4 M	48.7%	44.0%	\$55.7 M	\$188.09
4.	Boston (BOS) – Los Angeles (BUR/ONT/LAX/LGB/SNA)	\$202.6 M	16.3%	10.9%	\$39.3 M	\$102.82
5.	Boston (BOS) – Miami (MIA/FLL)	\$137.1 M	21.3%	17.7%	\$37.8 M	\$102.64
6.	Boston (BOS) – Phoenix (AZA/PHX) ^[4]	\$76.3 M	36.4%	32.1%	\$35.9 M	\$255.50
7.	Boston (BOS) – Dallas/Fort Worth (DFW/DAL) ^[4]	\$111.0 M	24.9%	21.7%	\$34.2 M	\$135.45
8.	Boston (BOS) – NYC (JFK/LGA) ^[5]	\$105.4 M	20.7%	12.3%	\$21.7 M	\$72.82
9.	Boston (BOS) – Chicago (MDW/ORD)	\$163.2 M	13.4%	7.1%	\$17.2 M	\$34.65
10.	Boston (BOS) – Rochester (ROC) ^[4]	\$4.2 M	94.7%	84.9%	\$5.7 M	\$319.43
11.	Boston (BOS) – Syracuse (SYR) ^[4]	\$1.8 M	70.4%	60.1%	\$2.2 M	\$256.19
Markets with NYC endpoint						
12.	NYC (JFK/LGA) – Miami (MIA/FLL)	\$391.6 M	15.8%	10.2%	\$63.6 M	\$57.82
13.	NYC (JFK/LGA) – Los Angeles (BUR/ONT/LAX/LGB/SNA)	\$692.3 M	7.5%	4.7%	\$53.9 M	\$54.51
14.	NYC (JFK/LGA) – Boston (BOS) ^[5]	\$105.4 M	20.7%	12.3%	\$21.7 M	\$72.82
15.	NYC (JFK/LGA) – San Francisco (SJC/OAK/SFO)	\$365.8 M	4.5%	2.4%	\$15.0 M	\$26.58
16.	NYC (JFK/LGA) – Orlando (MCO)	\$192.9 M	6.3%	4.0%	\$12.4 M	\$21.56
17.	NYC (JFK/LGA) – Phoenix (AZA/PHX)	\$91.9 M	10.7%	7.3%	\$10.8 M	\$58.74
18.	NYC (JFK/LGA) – Las Vegas (LAS)	\$147.8 M	5.7%	3.3%	\$8.4 M	\$32.44
19.	NYC (JFK/LGA) – Raleigh/Durham (RDU)	\$68.7 M	12.7%	8.0%	\$8.2 M	\$37.77
20.	NYC (JFK/LGA) – Austin (AUS)	\$74.4 M	11.4%	6.1%	\$7.3 M	\$44.78
21.	NYC (JFK/LGA) – Chicago (MDW/ORD)	\$325.4 M	2.7%	1.1%	\$5.2 M	\$5.15
22.	NYC (JFK/LGA) – San Diego (SAN)	\$93.6 M	3.9%	2.2%	\$3.5 M	\$22.12
23.	NYC (JFK/LGA) – Atlanta (ATL)	\$254.6 M	4.2%	0.9%	\$3.3 M	\$4.80
24.	NYC (JFK/LGA) – West Palm Beach/Palm Beach (PBI)	\$104.8 M	3.0%	1.9%	\$3.2 M	\$11.85
25.	NYC (JFK/LGA) – Martha's Vineyard (MVY)	\$3.1 M	51.2%	48.8%	\$2.9 M	\$365.33
26.	NYC (JFK/LGA) – Charleston (CHS)	\$35.8 M	8.0%	4.6%	\$2.5 M	\$22.25
27.	NYC (JFK/LGA) – Nantucket (ACK)	\$5.1 M	24.8%	24.3%	\$2.2 M	\$165.66
28.	NYC (JFK/LGA) – Portland, ME (PWM)	\$11.8 M	11.7%	6.0%	\$1.3 M	\$35.68
29.	NYC (JFK/LGA) – Savannah (SAV)	\$26.6 M	2.8%	1.7%	\$0.6 M	\$7.03
Market with EWR endpoint						
30.	Newark (EWR) – Miami (MIA/FLL)	\$189.9 M	6.1%	2.6%	\$7.9 M	\$15.08

Source: DB1B; T-100; MGIA; First Amendment to the MGIA

Note: NEA nonstop overlap markets are determined at the annual, nondirectional level. The exhibit excludes NYC (JFK/LGA)–Daytona Beach, FL (DAB), NYC (JFK/LGA)–Charlotte (CLT), and NYC (JFK/LGA)–Seattle (SEA), where structural change prior to COVID-19 made the market no longer an NEA nonstop overlap.

[1] Price changes are averages across all relevant products, weighted by pre-NEA passenger count.

[2] Overcharge is the difference in observed and post-NEA prices multiplied by the number of tickets sold in the pre-NEA, 2019 data. Overcharge is adjusted to account for one-way passengers using quarter-specific one-way passenger scaling factors. See Appendix § 14.4 for an explanation of this adjustment.

[3] Values based off of 2019 Q4 only because it is the only quarter I use to quantify the competitive effects of the NEA. Overcharge and AA/B6 pre-NEA revenue are scaled up for each direction separately to the full year using passenger counts. American and JetBlue were the only nonstop carriers for Q1, Q2, and part of Q3, but Delta began offering nonstop service during Q3.

[4] Currently carved out of the NEA according to the First Amendment to the MGIA. Defendants acknowledge that these markets have only American, JetBlue, and potentially one other airline as competitors.

[5] Boston (BOS) – NYC (JFK/LGA) is included in both the BOS endpoint and NYC endpoint panels.

257. In Boston markets, I estimate overcharges in 2019 in the tens of millions of dollars for 9 of the 11 markets, and per passenger overcharges of more than \$100 in 9 markets and more than \$30 in all 11 markets. The Boston Logan–Washington National market would experience the most overcharge in total (\$108 million) and a large overcharge per passenger (\$246). The Boston Logan–Charlotte (CLT) market would experience the most overcharge per passenger (\$410) and a large total overcharge (\$70 million).³¹⁰ In other, smaller Boston markets, the NEA would result in large overcharges per passenger even if total overcharges are relatively smaller (e.g., Boston Logan–Greater Rochester International Airport (ROC)).

258. In NYC markets, 10 of the 18 markets have total annual overcharges of more than \$5 million, and 14 have per passenger overcharges of more than \$20. Some markets, like service between NYC (JFK/LGA) and Los Angeles (BUR/ONT/LAX/LGB/SNA), Miami (MIA/FLL), and San Francisco (SJC/OAK/SFO) have relatively smaller per passenger effects, but large total overcharge to consumers because of the size of these markets.

259. I now turn to market-level results for the NEA mixed overlap markets. In Exhibit 26, I present results for the ten NEA mixed overlap markets for which the NEA would result in the greatest overcharge to consumers.

260. In these NEA mixed overlap markets, the strongest increase in incentive to raise prices created by the NEA comes from a weakened incentive for the connect products (generally owned by American) to aggressively compete with the nonstop products (generally owned by JetBlue). Indeed, the NEA creates an incentive to raise prices of connect products by more than 7 percent on average across all NEA mixed overlap markets (see Exhibit 24 above) and by more than 10 percent in all but one of the top ten markets in Exhibit 26.

261. In other NEA mixed overlaps, where I estimate lower price effects, there is still substantial harm to consumers. For example, consider service between Boston Logan and San Francisco (SJC/OAK/SFO), where American has an incentive to raise connect prices by 6.8 percent on average, resulting in an overcharge of \$1.6 million.

³¹⁰ Boston Logan–Charlotte (CLT) currently is carved out of the NEA. See First Amendment to the MGIA.

EXHIBIT 26**Market-level simulation results, Select domestic NEA mixed overlap markets**

Market	Revenue pre-NEA	Price change ^[1]				Overcharge ^[2]	
		B6 nonstop ^[3]	AA connect	B6 connect	All products	Total	Per pre-NEA passenger
1. NYC (JFK/LGA) – Albuquerque (ABQ)	\$16.6 M	11.4%	18.4%	-	10.1%	\$2.9 M	\$74.97
2. Boston (BOS) – San Diego (SAN)	\$68.9 M	1.7%	13.2%	2.5%	2.2%	\$2.7 M	\$22.76
3. Boston (BOS) – Savannah (SAV)	\$16.7 M	7.9%	54.1%	13.1%	10.2%	\$2.4 M	\$49.44
4. NYC (JFK/LGA) – Sacramento, CA (SMF)	\$21.6 M	4.3%	17.4%	3.3%	4.8%	\$2.0 M	\$42.97
5. NYC (JFK/LGA) – Palm Springs (PSP)	\$9.9 M	11.5%	16.9%	11.8%	11.1%	\$1.9 M	\$94.16
6. Boston (BOS) – West Palm Beach (PBI)	\$58.0 M	1.6%	36.2%	-0.9%	2.1%	\$1.8 M	\$11.78
7. Boston (BOS) – San Juan (SJU)	\$42.9 M	2.4%	26.2%	-1.8%	2.7%	\$1.8 M	\$21.20
8. Boston (BOS) – San Francisco (SJC/OAK/SFO)	\$253.5 M	0.4%	6.8%	1.8%	0.4%	\$1.6 M	\$4.02
9. Boston (BOS) – Fort Myers (RSW)	\$72.5 M	0.9%	30.4%	0.2%	1.3%	\$1.5 M	\$8.10
10. Boston (BOS) – Charleston (CHS)	\$23.7 M	3.0%	29.5%	2.2%	4.1%	\$1.4 M	\$21.73

Source: DB1B; T-100; MGIA

Note: Table includes the ten NEA mixed overlap markets with the largest total overcharge.

[1] Price changes are averages across all relevant products, weighted by pre-NEA passenger count.

[2] Overcharge is the difference in observed and post-NEA prices multiplied by the number of tickets sold in the observed data.

Overcharge is adjusted to account for one-way passengers using quarter-specific one-way passenger scaling factors. See Appendix § 14.4 for an explanation of this adjustment.

[3] American did not operate any nonstop products in any of these markets in 2019.

262. I now present results for connect overlap and other relevant markets. In Exhibit 27, I present the 10 connect overlap markets for which the NEA would result in the greatest total harm to consumers. Many of these markets are relatively small in terms of total revenues (less than \$8 million in 2019). While total overcharge for each in 2019 is less than \$500 thousand, I estimate substantial per passenger harm in these markets, including overcharges of more than \$25 per passenger in 6 of the 10 markets.

EXHIBIT 27**Market-level simulation results, Select domestic connect overlap markets**

Market	Revenue pre-NEA	Price Change ^[1]					Overcharge ^[2]	
		AA nonstop	B6 nonstop	AA connect	B6 connect	All products	Total	Per pre-NEA passenger
1. Boston (BOS) – Key West (EYW)	\$4.7 M	-	-	5.7%	17.7%	5.8%	\$0.4 M	\$62.61
2. Los Angeles (BUR/ONT/LAX/SNA/LGB) – San Juan (SJU)	\$18.6 M	-	-	1.6%	0.6%	0.8%	\$0.3 M	\$10.82
3. NYC (JFK/LGA) – Christiansted, VI (STX/SSB)	\$2.1 M	-	-	5.7%	13.0%	6.6%	\$0.3 M	\$73.72
4. Boston (BOS) – Reno (RNO)	\$7.1 M	-	-	1.6%	12.6%	1.3%	\$0.2 M	\$14.91
5. Washington National (DCA) – Nantucket (ACK)	\$2.4 M	1.8%	-1.3%	28.6%	14.1%	4.3%	\$0.2 M	\$27.39
6. Boston (BOS) – Christiansted, VI (STX/SSB)	\$1.7 M	-	-	4.3%	15.0%	5.5%	\$0.2 M	\$68.54
7. Nantucket (ACK) – Philadelphia (PHL)	\$0.3 M	-	-	53.2%	23.9%	28.2%	\$0.1 M	\$227.05
8. Washington National (DCA) – Martha's Vineyard (MVY)	\$1.7 M	3.8%	-	41.4%	7.5%	5.5%	\$0.1 M	\$47.13
9. Washington National (DCA) – Syracuse (SYR)	\$7.2 M	-0.3%	-	16.7%	3.1%	1.6%	\$0.1 M	\$7.94
10. Charlotte (CLT) – Rochester (ROC)	\$9.1 M	0.4%	-	12.1%	1.7%	1.1%	\$0.1 M	\$6.56

Source: DB1B; T-100; MGIA

Note: Table includes the ten connect overlap markets with the largest total overcharge, and does not include overlap markets with an endpoint of Worcester.

[1] Price changes are averages across all relevant products, weighted by pre-NEA passenger count.

[2] Overcharge is the difference in observed and post-NEA prices multiplied by the number of tickets sold in the observed data.

Overcharge is adjusted to account for one-way passengers using quarter-specific one-way passenger scaling factors. See Appendix § 14.4 for an explanation of this adjustment.

263. The effect of the NEA in these connect overlap markets comes primarily through price increases on American or JetBlue connect products—typically whichever has the smaller pre-NEA market share. However, in some of these markets, such as service between Washington National and Nantucket (ACK), one or both Defendants operated nonstop products in addition in 2019. In such markets, the pricing incentives more closely resemble those of the markets in Exhibit 28, discussed below.

264. In Exhibit 28, I show results for the five other markets with the largest total overcharge. This exhibit illustrates the incentives to change prices in markets without any overlap; in these five examples, JetBlue did not operate. Nonetheless, American faces an incentive to redirect passengers toward its products that are somewhat less affected by the NEA's revenue-sharing feature. In the four New York markets, this means pushing passengers away from nonstop products that are fully covered by NEA profit sharing toward connect products (connecting via non-NEA airports), which would only be partially affected by NEA profit sharing. In the market between Boston Logan and Wilmington, NC (ILM), the incentives involve redirecting passengers among various connect products. The Exhibit shows that, on net, this tends to create an incentive to raise prices—sometimes by up to \$46 per passenger. However, these markets are also small and so total overcharges are relatively smaller, with none exceeding \$850 thousand.

EXHIBIT 28

Market-level simulation results, Select domestic other relevant markets

Market	Revenue pre-NEA	Price change ^[1]				Overcharge ^[2]	
		AA nonstop ^[3]	AA connect ^[3]	AA overall ^[3]	All products	Total	Per pre- NEA passenger
1. NYC (JFK/LGA) – Wilmington, NC (ILM)	\$11.7 M	8.1%	-6.5%	6.3%	6.2%	\$0.9 M	\$26.13
2. NYC (JFK/LGA) – Dayton, OH (DAY)	\$7.9 M	9.7%	4.9%	9.1%	8.5%	\$0.8 M	\$38.25
3. NYC (JFK/LGA) – Roanoke, VA (ROA)	\$3.5 M	11.4%	0.1%	8.5%	8.2%	\$0.4 M	\$46.29
4. Boston (BOS) – Wilmington, NC (ILM)	\$3.8 M	-	6.9%	6.9%	6.3%	\$0.3 M	\$36.20
5. NYC (JFK/LGA) – Fayetteville, AR (FYV/XNA)	\$16.2 M	4.2%	-7.3%	1.7%	1.2%	\$0.3 M	\$7.95

Source: DB1B; T-100; MGIA

Note: Table includes the five other relevant markets with the largest total overcharge.

[1] Price changes are averages across all relevant products, weighted by pre-NEA passenger count.

[2] Overcharge is the difference in observed and post-NEA prices multiplied by the number of tickets sold in the pre-NEA, 2019 data. Overcharge is adjusted to account for one-way passengers using quarter-specific one-way passenger scaling factors. See Appendix § 14.4 for an explanation of this adjustment.

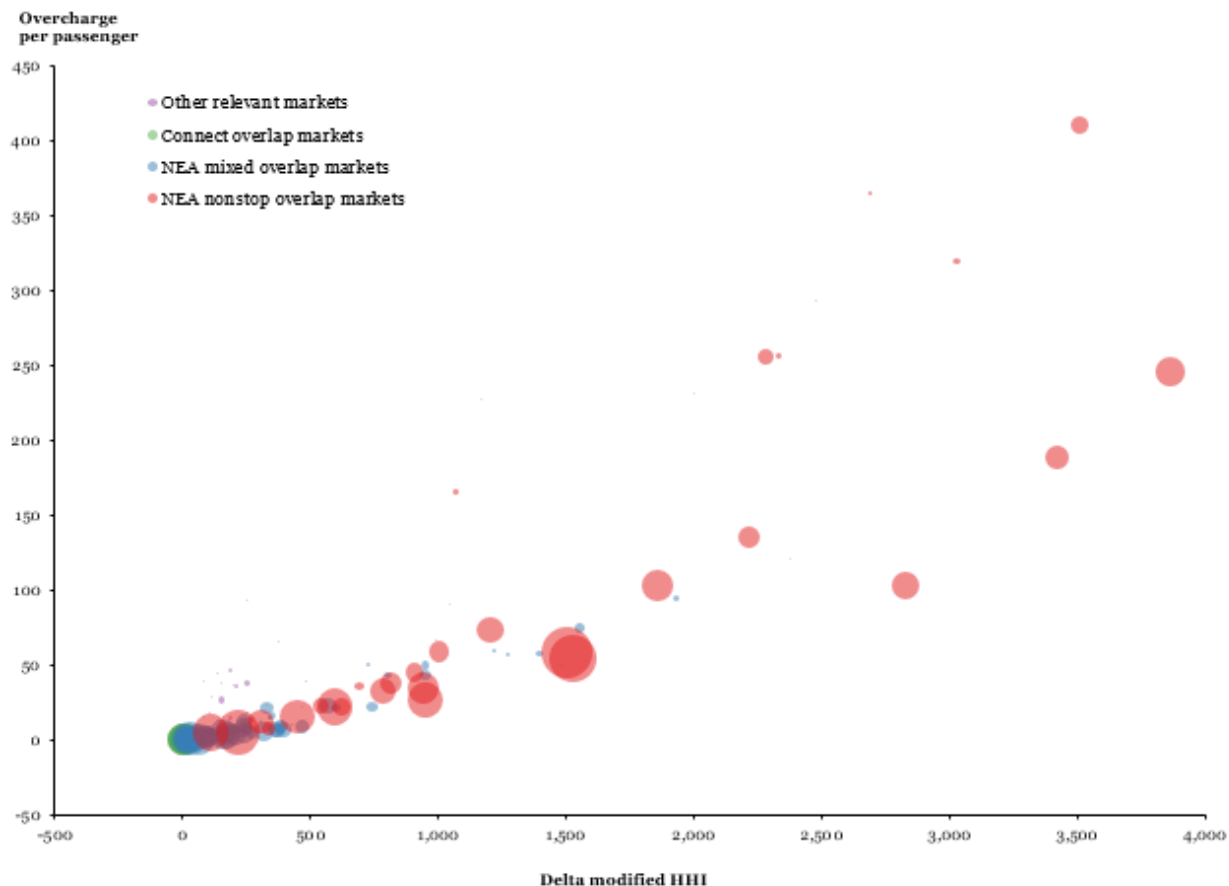
[3] JetBlue did not operate in any of these markets in 2019.

265. In Exhibit 29, I graphically illustrate harm across all relevant markets by plotting, for each market, the change in modified HHI (x-axis) and the estimated per-passenger overcharge (y-axis). I indicate larger markets with

larger symbols. As a general matter, this chart demonstrates that the estimates of harm from my merger simulation model are consistent with the analysis of market concentrations.

EXHIBIT 29

Overcharge per passenger vs. the change in modified HHI



Source: DB1B; T-100; MGIA

Note: The size of the marker is proportional to the market's passenger count. Market categorization is at the nondirectional annual level. Market categories are defined in § 4.3. The exhibit excludes NYC (JFK/LGA) –Daytona Beach, FL (DAB), NYC (JFK/LGA) –Charlotte (CLT), and NYC (JFK/LGA) –Seattle (SEA), where structural change prior to COVID-19 made the market no longer an NEA nonstop overlap. Overcharge is the difference in observed and post-NEA prices multiplied by the number of tickets sold in the observed data. HHIs and per passenger overcharge for Boston Logan–Washington National are based off of 2019 Q4 only because it is the only quarter I use to quantify the competitive effects of the NEA; American and JetBlue were the only nonstop carriers for Q1, Q2, and part of Q3, but Delta began offering nonstop service during Q3.

266. NEA mixed overlap and connect overlap markets tend to exhibit a strong tradeoff between market size and harm per passenger, with the markets experiencing the most harm per passenger tending to be the smallest (e.g., service between NYC (JFK/LGA) and Albuquerque (ABQ), service between NYC (JFK/LGA) and Palm Springs (PSP), and service between Boston Logan and Charlotte Amalie, VI (STT/SPB)). This is because, in large markets, most traffic